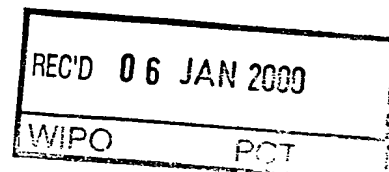




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Patent Office
Canberra

I, KAY WARD, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. PP 7293 for a patent by ARISTOCRAT LEISURE INDUSTRIES PTY LTD filed on 24 November 1998.

WITNESS my hand this
Twenty-third day of December 1999

KAY WARD
TEAM LEADER EXAMINATION
SUPPORT AND SALES



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AUSTRALIA

Patents Act 1990

ARISTOCRAT LEISURE INDUSTRIES PTY LTD

PROVISIONAL SPECIFICATION

Invention Title:

Slot machine pin and ball game

The invention is described in the following statement:

Slot machine pin and ball game

Introduction

The present invention relates to gaming machines of the type generally referred to as slot machines, and in particular the invention provides a new type of game played on such a machine.

5 Players who regularly play gaming machines quickly tire of particular games and therefore it is necessary for manufacturers of these machines to come up with innovative games or game features that add interest to the games provided on such machines in order to keep the players amused and therefore willing to continue playing the game.

10 **Description of the Prior Art**

Gaming or poker machines have been well known in the state of New South Wales for many years and have more recently gained considerable popularity throughout Australia, with quite substantial amounts of money wagered on these machines. There is a growing tendency for State
15 governments to legalise the use of gaming machines by licensing operators, with resulting revenue gains through licence fees and taxation of monies invested. The licensed operation of gaming machines is the subject of State legislation and regulation. This regulation almost always dictates a minimum percentage payout for a gaming machine. For example, a
20 minimum of 85% of monies invested must be returned as winnings, and manufacturers of gaming machines therefore must design their machines around these regulatory controls.

With the growth that has occurred in the gaming machine market there is intense competition between manufacturers to supply the various existing
25 and new venues. When selecting a supplier of gaming machines, the operator of a venue will often pay close attention to the popularity of various games with their patrons.

Therefore, gaming machine manufacturers are keen to devise games which are popular with players, as a mechanism for improving sales.

30 In particular, manufacturers regularly devise new games which have not previously been seen on slot machines in order to stimulate renewal of player interest.

Pachinko is a game popular in Japan in which an 11 mm diameter steel ball is fired into a labyrinth of pins or nails projecting from a back panel and
35 awards are gained if the balls can be caused to come to rest in certain

locations. Typically, when a ball is caused to come to rest in a designated prize winning position, the player is rewarded with additional balls, the number of balls awarded to the player being dependant on the particular location that the ball is brought to rest. The player purchases balls from the operator before commencing play, or when he runs out and after stopping play, a player may exchange balls for non-monetary prizes.

Summary of the Invention

~~According to a first aspect,~~ The present invention provides a game for an electronic gaming machine having credit means, reward means, game control means, display means, and player input controls, the control means being responsive to the credit means and the player input controls to play a game which is displayed on the display means and ~~if~~ a winning event occurs, a player reward is awarded by the reward means. ~~The game~~ providing a video display of a labyrinth of pins and the player using the player input controls to control the firing and trajectory of ball images on the display, player rewards being awarded when the ball images come to rest in predetermined prize winning locations.

~~In one embodiment,~~ The game is characterised in that the number of balls provided to a player for a game is dependant upon a number of credits bet on the game. ~~The number of balls provided for the first credit being~~ different to the number of balls provided ~~for~~ subsequent credits.

~~In another embodiment~~ ~~According to a second aspect,~~ the game present invention is characterised in that the configuration of the labyrinth of pins is varied depending upon the number of credits bet.

~~In yet a further embodiment~~ ~~According to a third aspect,~~ the game present invention is characterised in that rewards are assigned to one or more of the pins, such that the reward is awarded if the pin is struck by a ball and the number of pins having rewards assigned to them is related to the number of credits bet.

~~According to a still further embodiment~~ ~~fourth aspect,~~ the game present invention is characterised in that a plurality of targets are provided and rewards are assigned to the targets such that if a ball comes to rest in or on the target, a reward is awarded and the number of targets provided is related to the number of credits bet.

Another embodiment According to a fifth aspect provides a game, the present invention is characterised in that rewards provided in the game have values which are a function of the number of credits bet.

Brief Description of the Drawings

5 Embodiments of the present invention will now be described by way of example with reference to the accompanying drawings in which:

 Figure 1 illustrates a touch screen slot machine incorporating the present invention;

 Figure 2 is a schematic diagram of a slot machine control circuit.

10 Figure 3 is a diagram of a game screen with game features indicated; and

 Figure 4 is a diagram of a game screen showing prizes awarded for various numbers of balls in each of a plurality of buckets.

Detailed Description of the Preferred Embodiments

15 In the following detailed description, the methodology of the embodiments will be described and it is to be understood that it is within the capabilities of the non-inventive worker in the art to introduce the methodology on any standard microprocessor based gaming machine by means of appropriate programming.

20 Referring to Figure 1, the illustrated embodiment of the invention is housed in a conventional slot machine cabinet 10 including a prize display 12, a coin entry slot 13, a payout tray 14 and internally mounted game control processor circuits (refer to Figure 2).

 The program to implement the game of the present invention runs on a standard gaming machine control processor 31 as illustrated schematically in Figure 6. This processor forms part of a controller 30 which drives the display screen 11 and receives touch input signals from touch sensors 32 as well as receiving coin input pulses from a coin chute mechanism 33 and driving a coin payout mechanism 34.

30 This is a new type of video game which involves balls (objects) being dropped through a series of pins (obstacles) and eventually filling a number of containers.

 It is similar to Pachinko. See attached diagram.

35 Prizes are paid according to either the number of balls which are in each container at the end of the ball drop and/or the manner in which the pins are hit. See attached diagram.

The basic structure of the game can be varied by:

- (i) changing the number of balls to be dropped,
- (ii) changing the position from where the balls are dropped,
- (iii) changing the number of rows of pins,
- 5 (iv) changing the pin pattern,
- (v) awarding prizes/bonuses/features depending on how the containers and/or pins hit.

Both these can change from game to game.

Betting Strategy

10 The betting strategy of the game can be any of the following:

- (i) the higher the bet the more balls drop. For example: Bet 1, 3, 6, 12 and 20 credits give 5, 6, 7, 8, and 9 balls respectively,
- (ii) the higher the bet more or less rows of pins appear,
- (iii) the higher the bet more or less pins appear,
- 15 (iv) the higher the bet more containers become available. For example, a bet of 1 credit buys the first 4 containers from left to right; a bet of 2 credits buys all eight,
- (v) the higher the bet more pin features can be won,
- (vi) the higher the bet all prizes are multiplied linearly.

20 Game Features

A. Containers:

- (i) Free game, free balls or any other type of bonus can be won when certain containers are filled in a pre-determined way. For example: 10 free games are won when 2 or more balls end up in the last column.
- 25 (ii) These may not always be open, they may have a Preventing balls filling them.
- (iii) Some containers may have springs which will flick the balls to other containers.
- (iv) Some containers will become bonus baskets.

30 B. Pins:

- (i) Depending on either the number of times each pin is hit and/or whether or not certain patterns such as a row, diagonal or diamond shape made up of hit pins occur bonuses are paid such as:

- * free games
- 35 * free balls
- * second screen features

* wins multiplied by odds

* progressives

(ii) The pins can occur in different patterns from game to game. For example: in one game they make up a triangular shape; in another, a diamond shape.

(iii) Pins may swallow or capture balls when hit.

(iv) Pins may release balls when hit.

(v) Each time a pin is hit it may change colour and/or record the number of hits to award bonuses.

(vi) Pins may have different colours so that when a certain combination of colours are all lit bonuses are paid.

(vii) Pins may be tilted so that the ball bounce will be biased to one side.

(viii) Pins may have holes in them for the ball to pass or may be able to be knocked over for the ball to continue on its path.

(ix) Pins, in any pattern, may randomly flash during the ball drop sequence awarding bonuses.

(x) Pins may be greyed out or move in and out to make it easier/harder for balls to roll.

(xi) Pins may be joined by a rod to block balls from rolling down certain paths.

(xii) Pins may have numbers on them which represent the amount of credits, free games, etc. won when they are either hit or lit.

(xiii) When all pins are hit/lit a bonus is paid.

(xiv) Some pins may have the ability to flick the ball in any direction.

25 Balls

(i) The balls may be the same colour, different colours during the same game or change colours from game to game. They may also have numbers on them. Both the colouring and numbers can be utilised to award prizes.

(ii) Special balls when hitting pins may split up into a number of balls.

(iii) Special balls may have the ability to jump from column to column and award prizes.

(iv) Special balls will enable bonuses to be found.

(v) There may be a larger ball which can knock pins over or split into smaller balls.

(vi) Balls may fall down the pin holes.

Pseudo Skill

(i) All games or only particular feature games may have an element of pseudo skill which enables the player to drop the balls at different angles.

(ii) The game may have a flipper to flick the balls.

5 It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

Dated this twenty fourth day of November 1998

ARISTOCRAT LEISURE INDUSTRIES
PTY LTD

Patent Attorneys for the Applicant:

F B RICE & CO

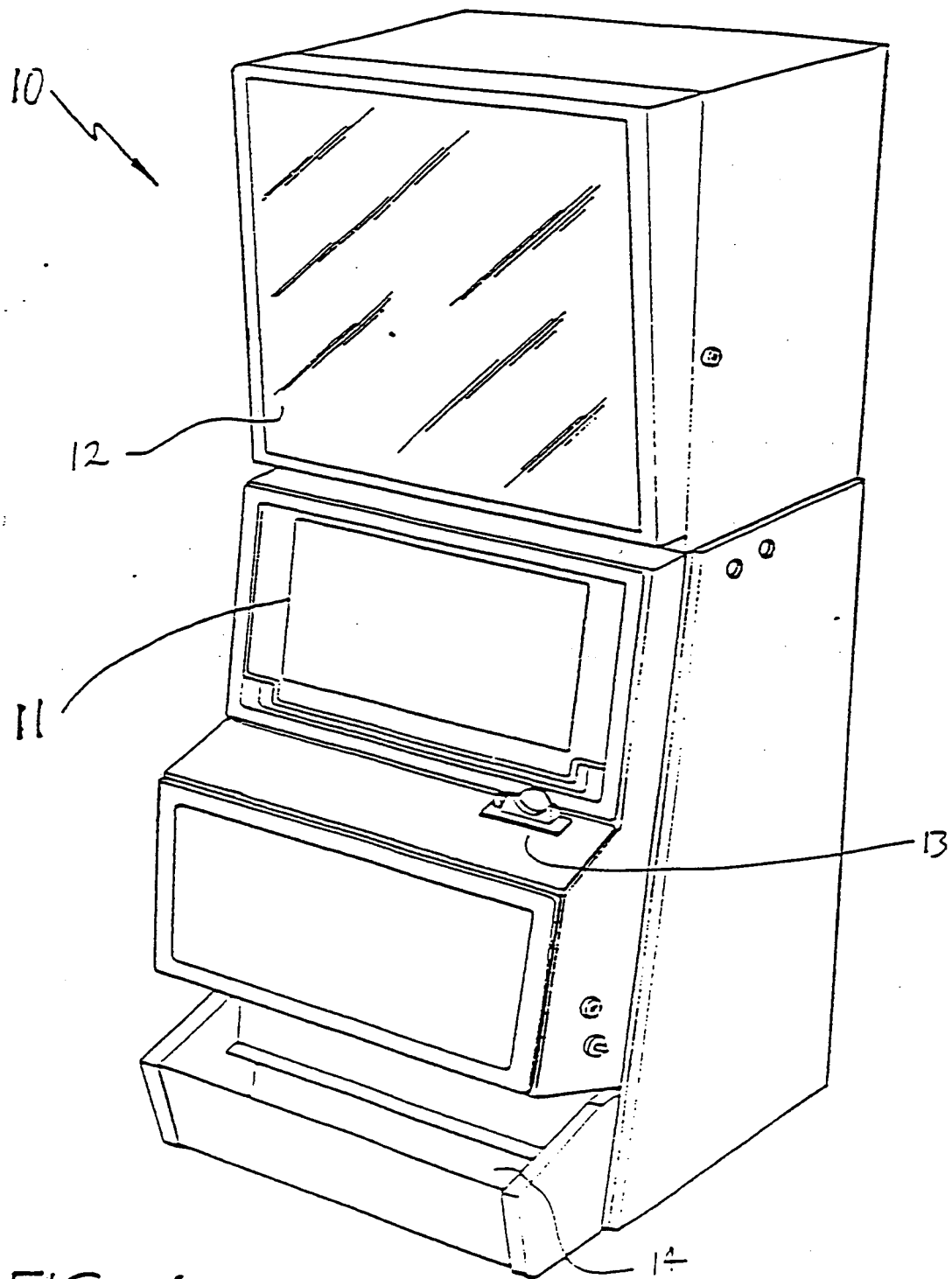


FIG. 1

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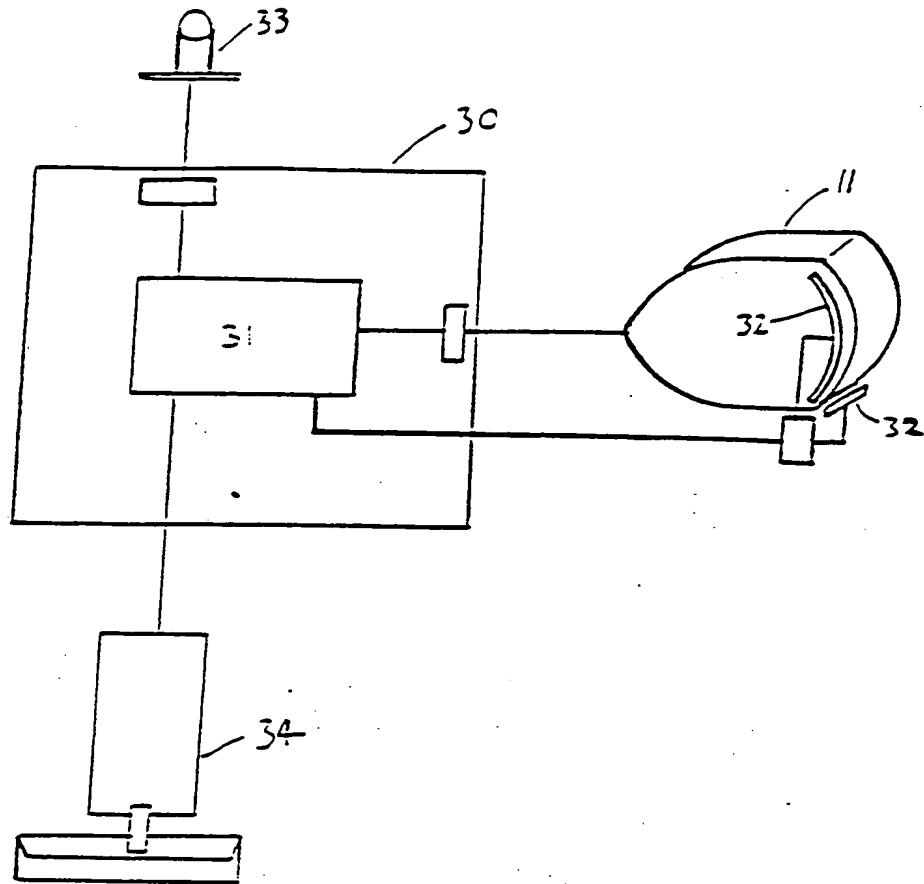


FIGURE 2

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Feature Win Prizes:

- Free Games
- Win multipliers
- Extra balls

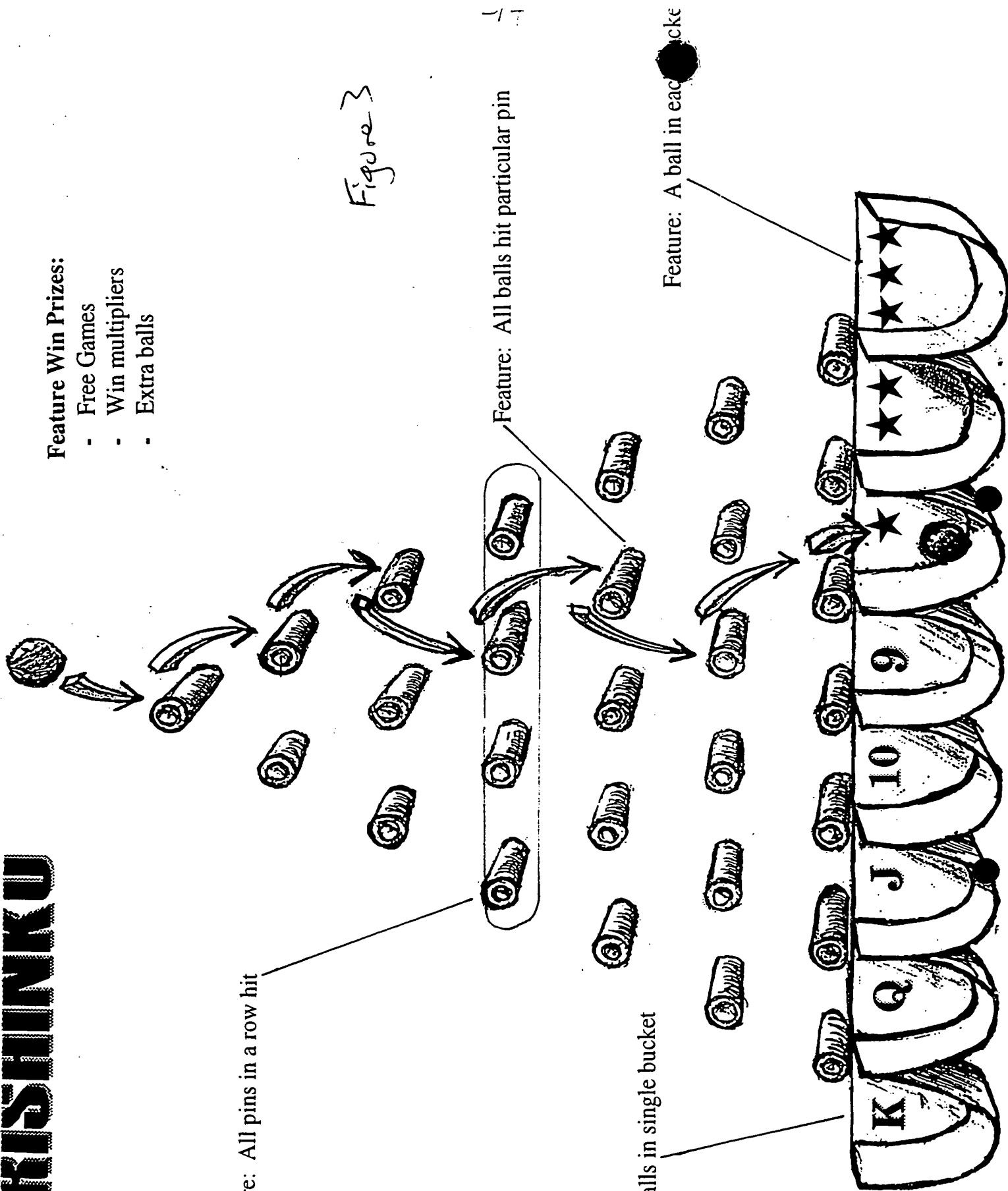
Fig 23

Feature: All pins in a row hit

Feature: All balls hit particular pin

Feature: All balls in single bucket

Feature: A ball in each bucket



ARISHINKO

	3	4	5	6	7	8	9
★★★	25	300	800	1000	2000	3000	10000
★★	10	100	500	800	900	1000	5000
★	2	20	100	500	550	850	2000

	3	4	5	6	7	8	9
K	25	300	800	1000	2000	3000	10000
Q	10	100	550	800	1000	2000	5000
J	2	20	100	700	750	800	1500
10	0	15	50	125	200	300	400
9	0	5	75	100	210	350	450

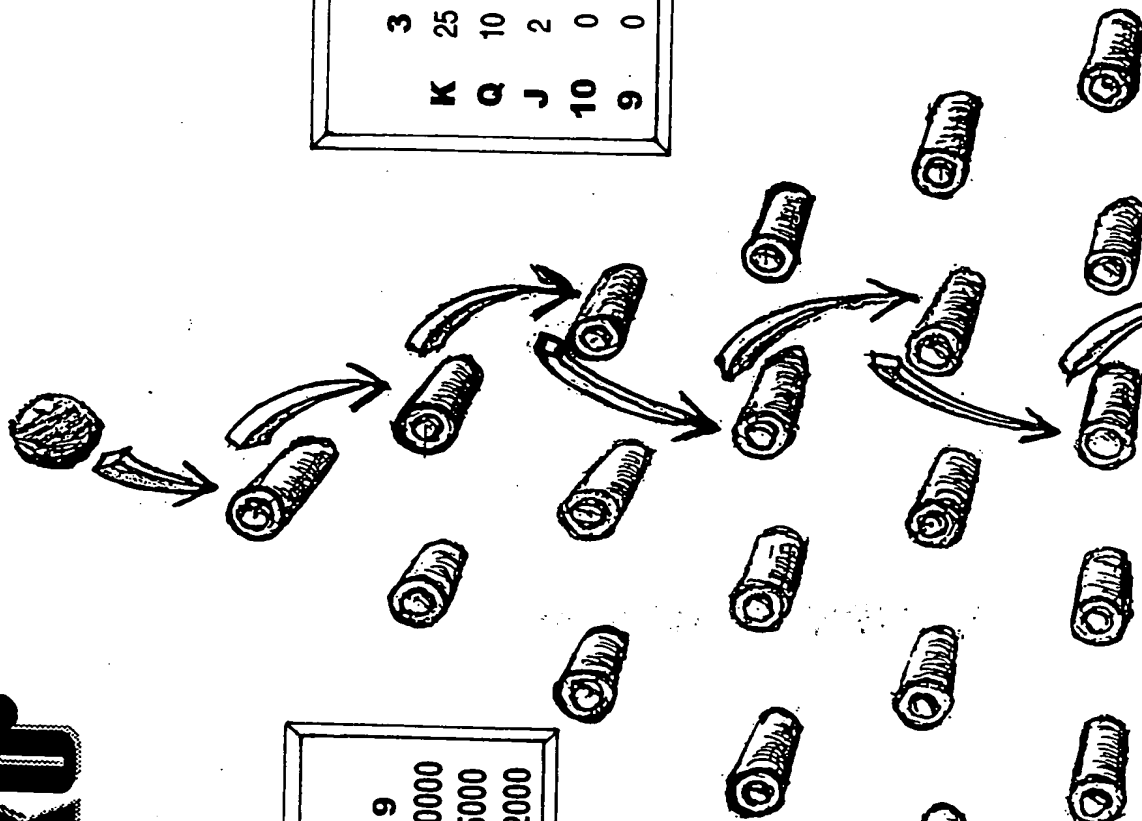
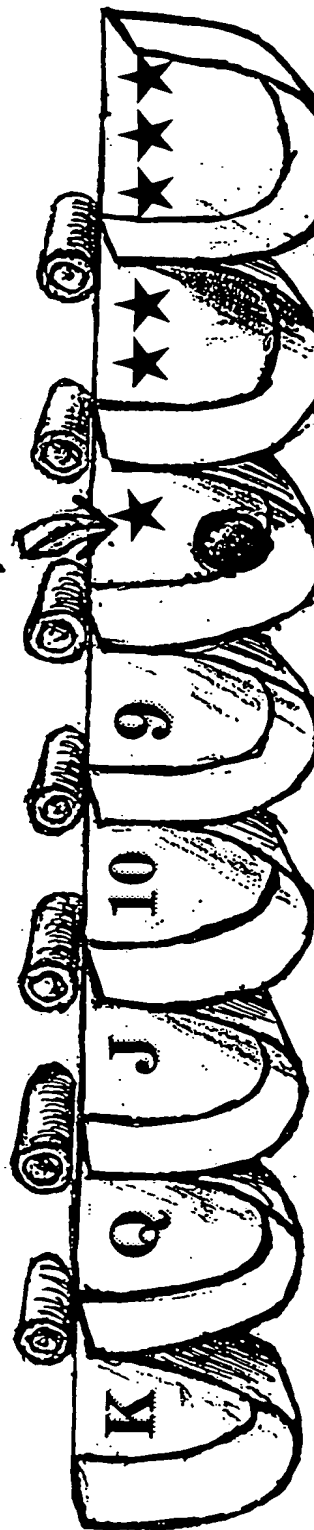


Figure 4



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